## **MICROWAVES KIT**



Reference : ONDCENT



Set allowing you to perform experiments in wave optics on wavelengths on a centimetre scale. A conical antenna transmitter emits a narrow beam of electromagnetic waves of linear polarisation with a wavelength of approx. 3 cm. To change the direction of polarisation, turn the conical antenna on the axis of the direction of propagation. The waves are revealed by a conical antenna receiver or a microwave probe. The service apparatus converts the received signal strength into a proportional output voltage that can be measured with a voltmeter. In addition, you can activate an acoustic signal whose volume is proportional to the intensity.

Possible experiments:

- Straight propagation of microwaves
- Reflection, absorption and transmission
- Microwave shielding
- Polarisation experiments
- Refraction experiments
- Diffraction and interference experiments
- Transmission of information Technical characteristics:



- Oscillator frequency: 9.4 GHz
- Transmitting power: 10 25 mW
- Internal frequency of the modulator: approx. 3 kHz
- Acoustic signal: switchable
- External modulation: 100 Hz -20 kHz, max. 1 V
- Output voltage: max. 10 V
- Conical antenna receiver: silicon diode with resonator
- Microwave probe: silicon diode with resonator
- Dimensions of the base device: 170 x 200 x 75 mm Composition:
- 1 Control Unit
- 1 transmitter with horn
- 1 Receiver with horn
- 1 Microwave probe
- 1 Microwave Bench, 800 mm
- 1 articulated microwave bench, 400 mm with plate holder
- 1 reflection plate, 180x180 mm<sup>2</sup>
- 1 polarisation grid, 180x180 mm<sup>2</sup>
- 1 Absorption plate, fibrous material, 180x180 mm<sup>2</sup>
- 1 paraffin prism
- 1 Prism Door Tray
- 1 plate with double slot
- 1 cover plate for double slot

